

10

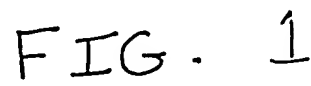


FIG. 2

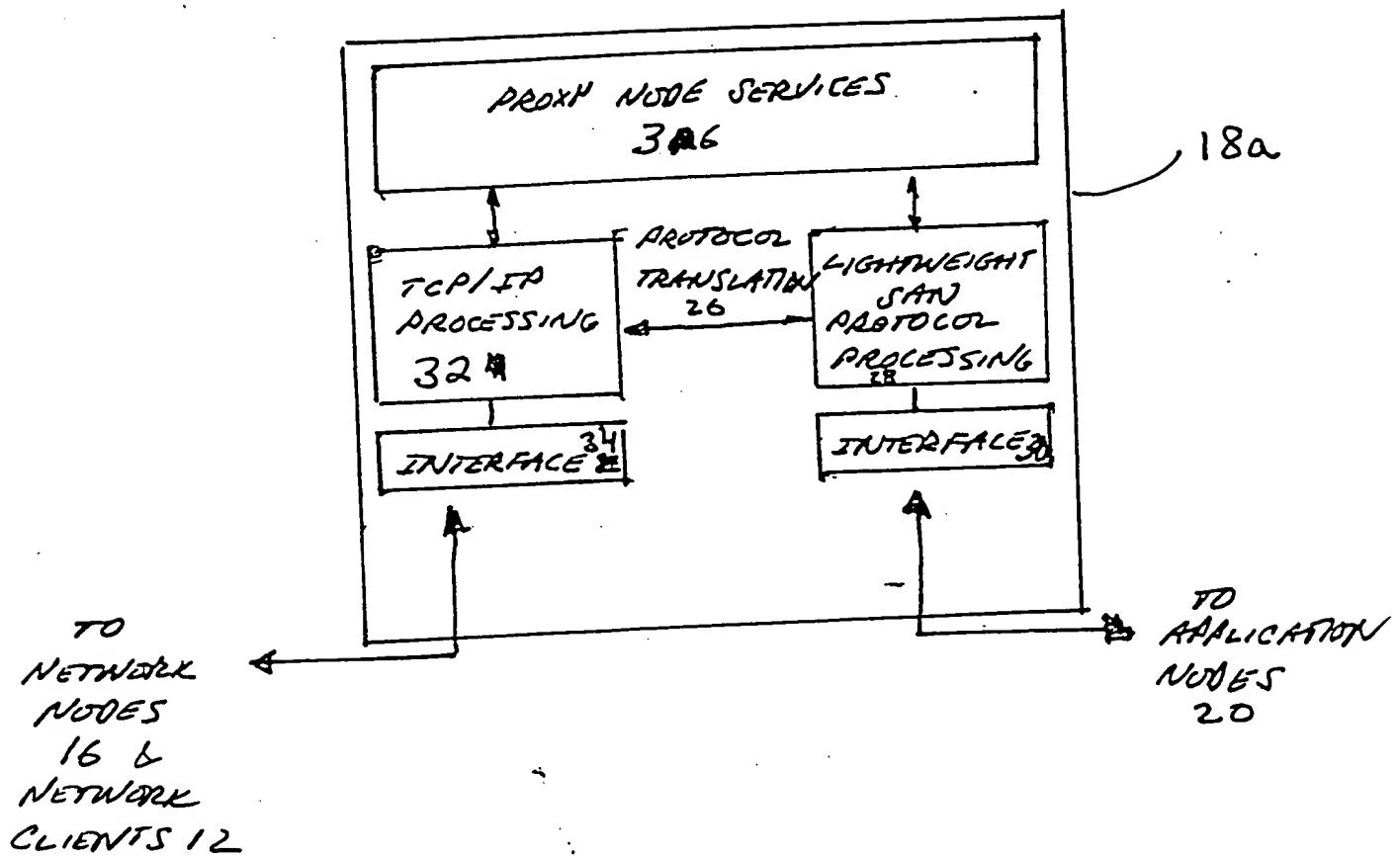
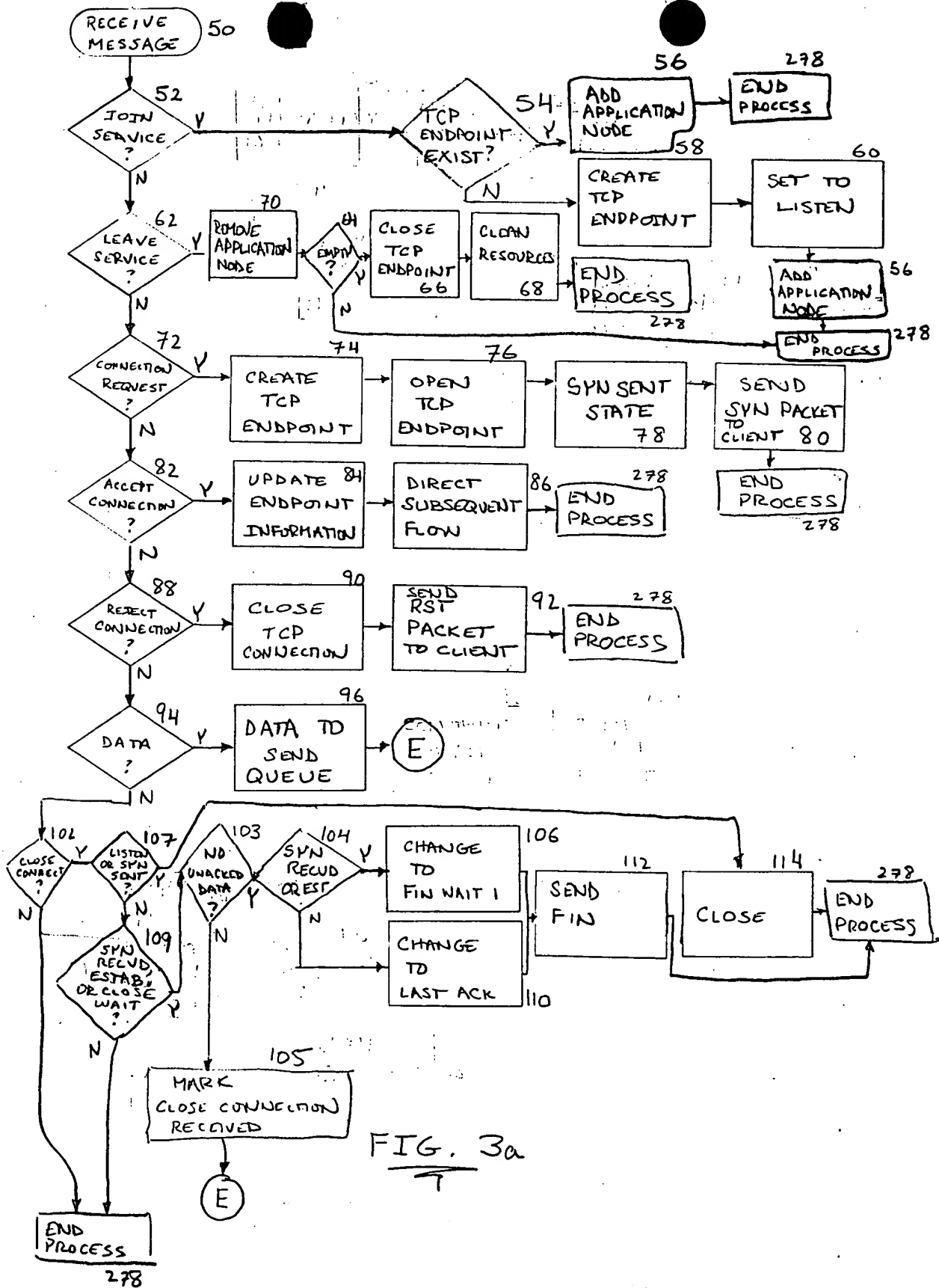


FIG. 2



```

graph TD
    150([RECEIVE PACKET]) --> 152{CHECKSUM OK?}
    152 -- N --> 280[DROP PACKET]
    280 --> 278[END PROCESS]
    152 -- Y --> 154{TCP ENDPOINT IDENTIFIED?}
    154 -- N --> 140{SYN FLAG SET?}
    140 -- N --> 144[SEND RST]
    144 --> 278
    140 -- Y --> 142{LISTEN STATE?}
    142 -- N --> 144
    142 -- Y --> 146[CREATE A NEW TCP ENDPOINT]
    146 --> 148[DUPLICATE TCBS]
    148 --> 154
    154 -- Y --> 150
  
```

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00758374-013001

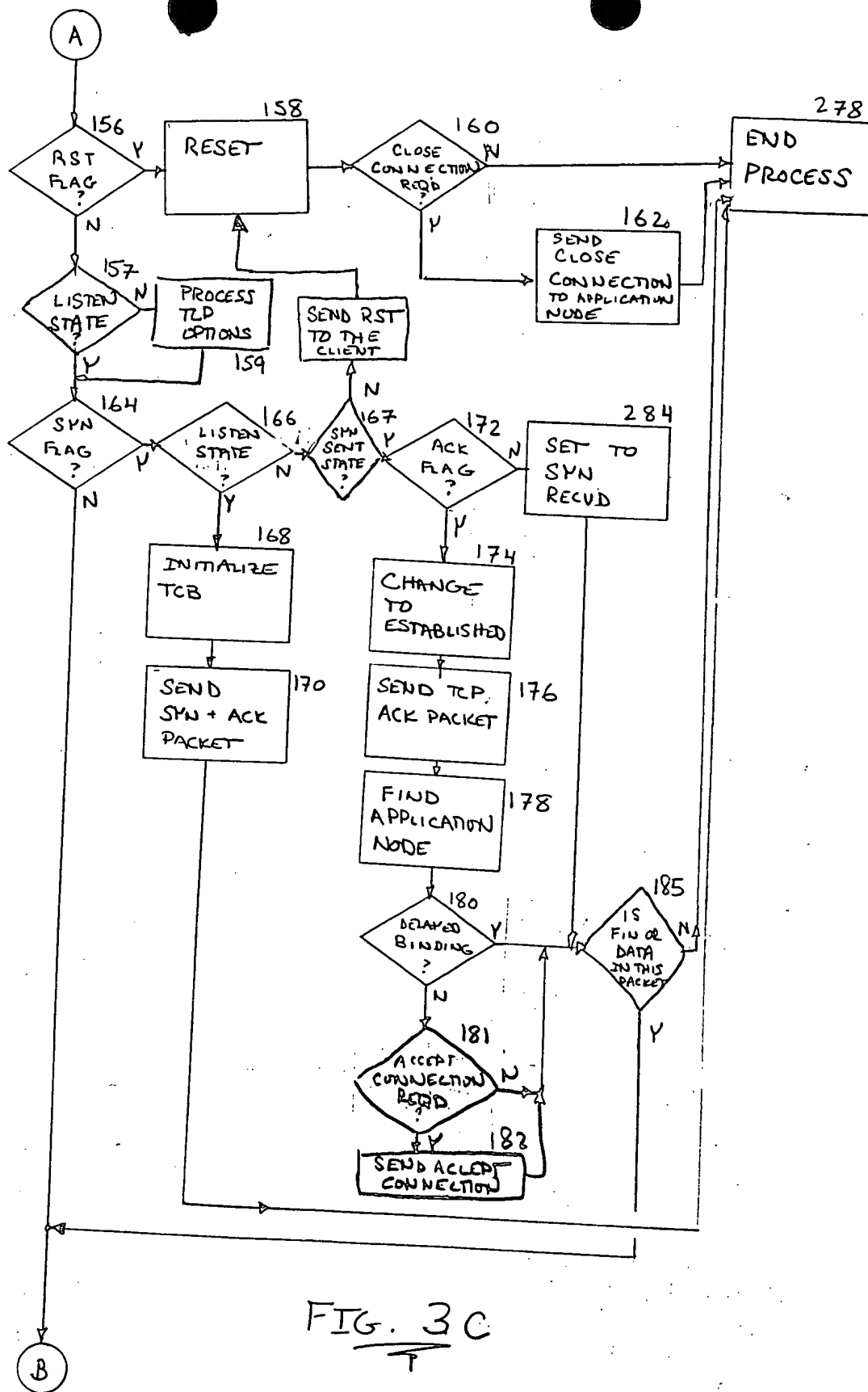


FIG. 3C

FORGET THE PAST

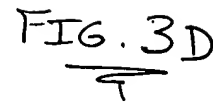
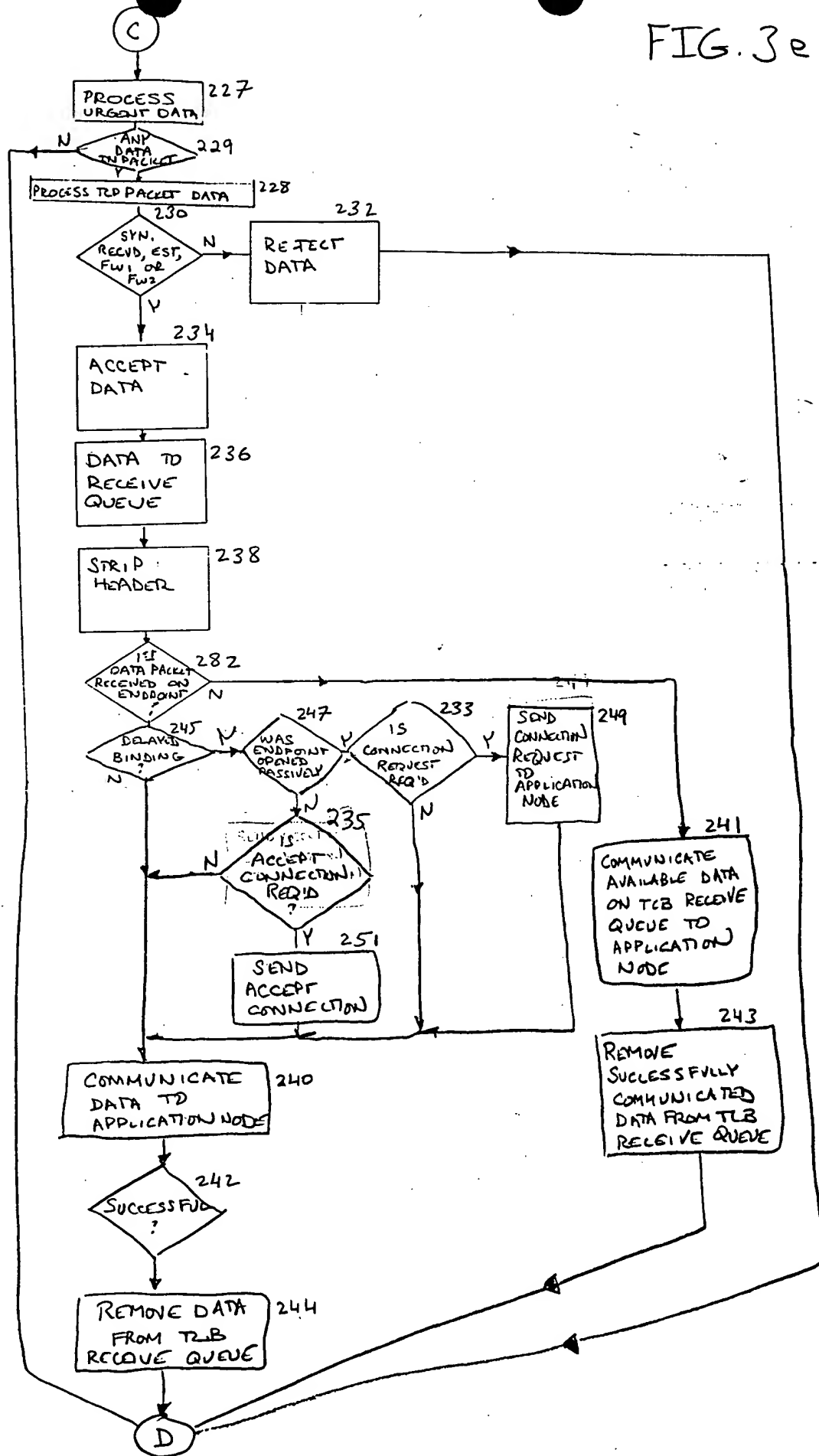


FIG. 3e



007634-01201

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graph TD
    CC((CC)) --> D((D))
    D --> 246{FIN FLAG?}
    246 -- Y --> 248{SND RECD OR ESTABLISH}
    246 -- N --> 268[SCAN RESEQUENCING QUEUE]
    248 -- Y --> 250[CLOSE WAIT]
    248 -- N --> 256{FINISH WAIT 1}
    250 --> 252{CLOSE CONN?}
    252 -- Y --> 254[SEND CLOSE CONNECTION]
    252 -- N --> 258{NO UNACKNOWLEDGED DATA?}
    256 -- Y --> 258
    256 -- N --> 264{FINISH WAIT 2}
    258 -- Y --> 260[CHANGE TO TIME WAIT]
    258 -- N --> 262[CLOSING]
    260 --> 262
    262 --> 266[TIME WAIT]
    264 -- Y --> 266
    264 -- N --> 268
    266 --> 268
    268 --> 264
    264 -- Y --> 271[DERIVE NEXT PACKET FROM RESEQUENCING QUEUE]
    264 -- N --> 273{IS PACKET OBSOLETE?}
    271 --> 273
    273 -- Y --> 275[FREE THE PACKET]
    273 -- N --> 264
    275 --> 264
    275 --> F((F))
    273 --> E((E))

```

FIG. 3f

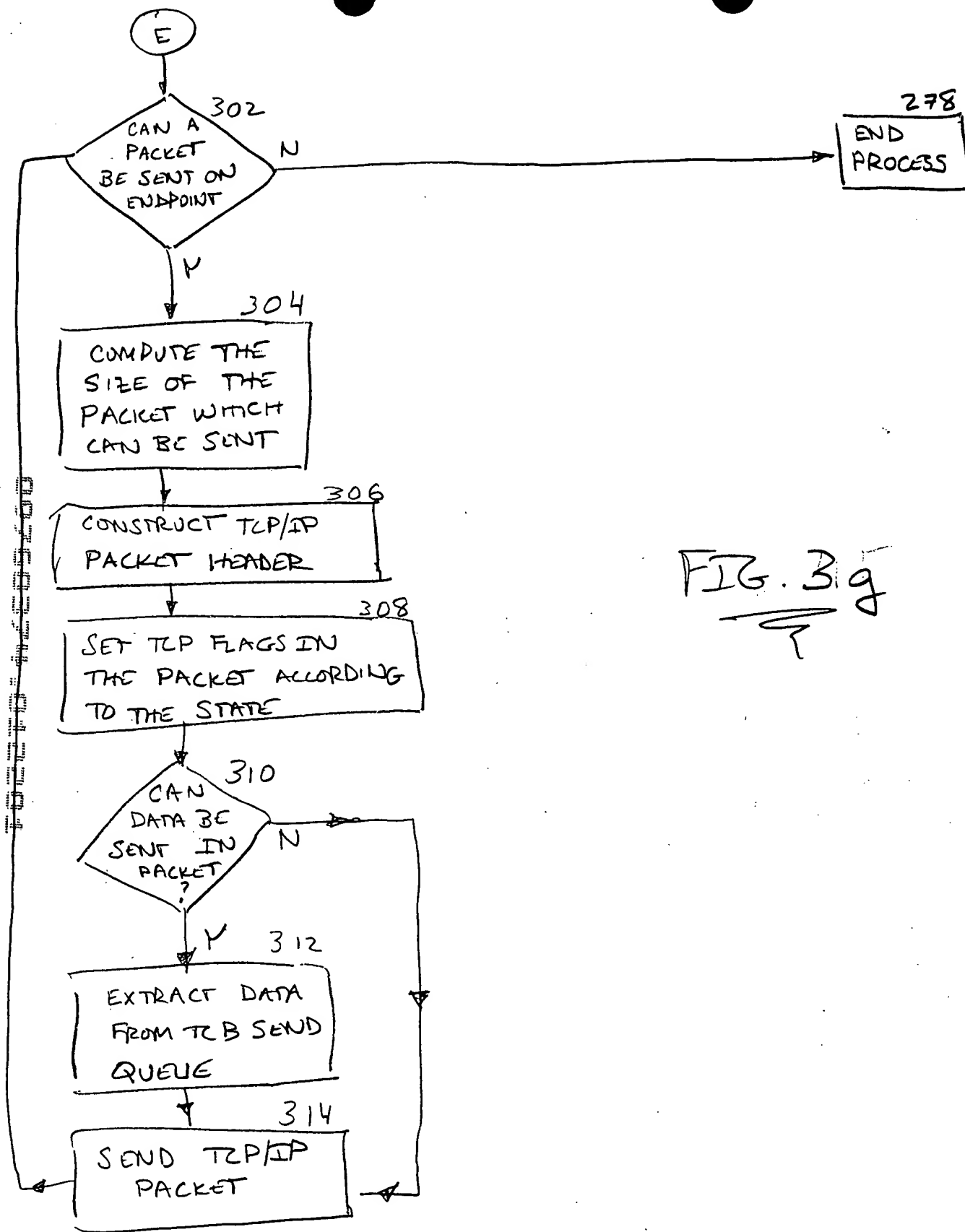


FIG. 31g

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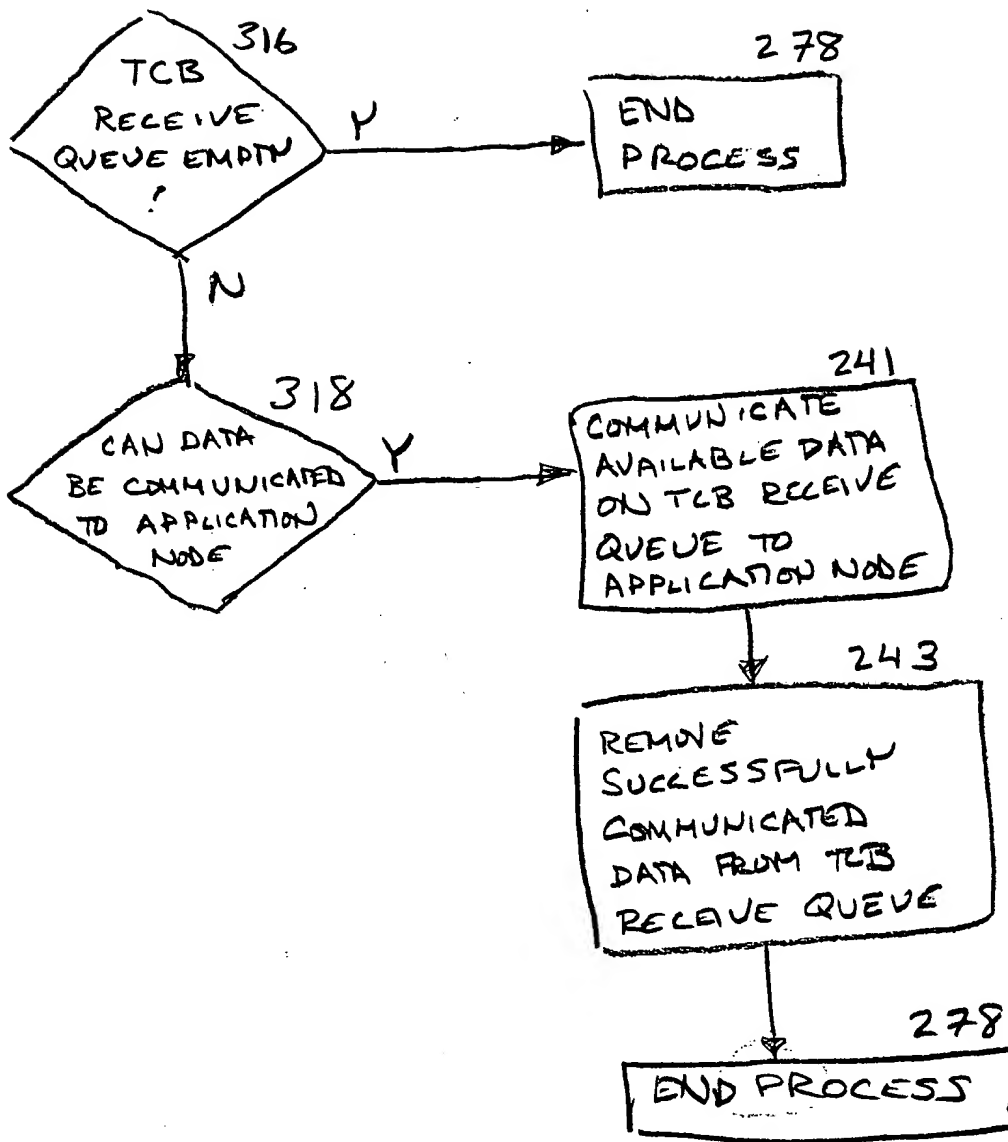


FIG 46

```
sequenceDiagram
    participant NC as Network Client 12
    participant NN as Network Node 16a
    participant PN as Proxy Node 18a
    participant AN as Application Node 20a

    NC->>NN: SYN 380
    NN->>PN: SYN+ACK 382
    PN->>NC: ACK 384
    NC->>NN: DATA 386
    NN->>PN: CONNECTION_REQUEST+ DATA 390
    PN->>NN: ACK 388
    PN->>AN: 392 ACCEPT_CONNECTION + DATA
    AN->>PN: DATA 396
    PN->>NN: DATA 398
    NN->>PN: DATA 400
    PN->>NN: DATA + CLOSE_CONNECTION
    NN->>PN: DATA 402
    PN->>NC: ACK 410
    NC->>NN: ACK 412
    NN->>PN: FIN
    PN->>NN: 414 ACK
    NN->>PN: FIN
```

Hand-drawn sequence diagram showing a TCP connection between a Network Client (12) and a Network Node (16a) via a Proxy Node (18a) to an Application Node (20a). The diagram includes SYN, ACK, DATA, and FIN packets with sequence numbers.

Participants: Network Client (12), Network Node (16a), Proxy Node (18a), Application Node (20a).

Sequence of events:

- Network Client (12) sends SYN 380 to Network Node (16a).
- Network Node (16a) sends SYN+ACK 382 to Proxy Node (18a).
- Proxy Node (18a) sends ACK 384 to Network Client (12).
- Network Client (12) sends DATA 386 to Network Node (16a).
- Network Node (16a) sends CONNECTION_REQUEST+ DATA 390 to Proxy Node (18a).
- Proxy Node (18a) sends ACK 388 to Network Node (16a).
- Proxy Node (18a) sends 392 ACCEPT_CONNECTION + DATA to Application Node (20a).
- Application Node (20a) sends DATA 396 to Proxy Node (18a).
- Proxy Node (18a) sends DATA 398 to Network Node (16a).
- Network Node (16a) sends DATA 400 to Proxy Node (18a).
- Proxy Node (18a) sends DATA + CLOSE_CONNECTION to Network Node (16a).
- Network Node (16a) sends DATA 402 to Proxy Node (18a).
- Proxy Node (18a) sends ACK 410 to Network Client (12).
- Network Client (12) sends ACK 412 to Network Node (16a).
- Network Node (16a) sends FIN to Proxy Node (18a).
- Proxy Node (18a) sends 414 ACK to Network Node (16a).
- Network Node (16a) sends FIN to Proxy Node (18a).

Handwritten annotations at the bottom:

- 320 (under Network Client and Network Node)
- 330 (under Proxy Node and Application Node)

FIG. 5

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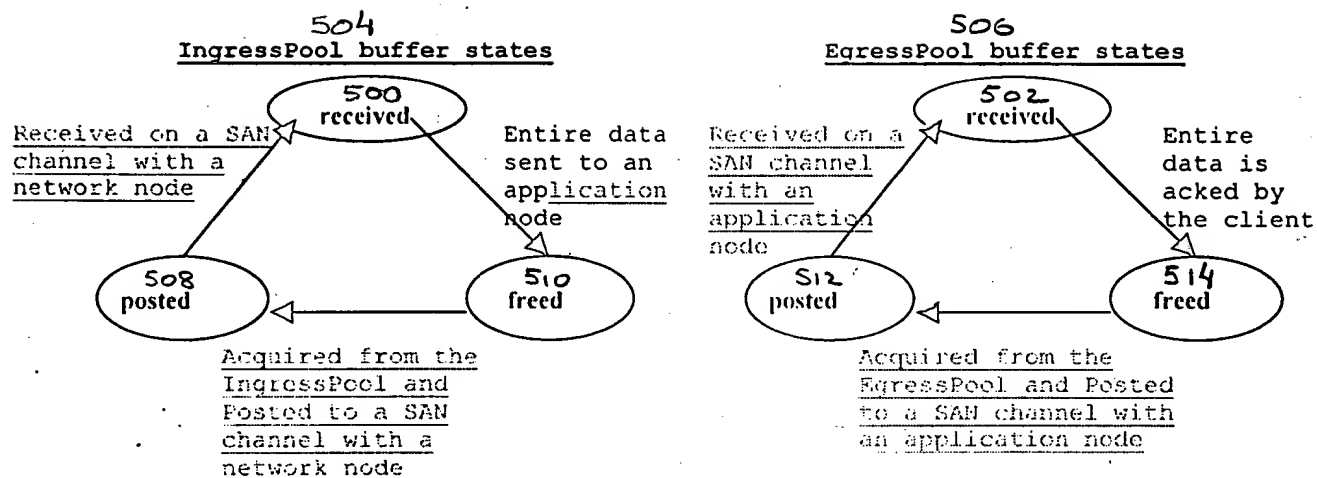


FIG. 6